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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Yaw S. Obeng, et al.

Serial No.:

09/938,150

Filed:

August 22, 2001

For:

RECEIVED TO 2003 POLISHING PAD COMPOSITION AND METHOD OF USE

Group No.:

1765

Examiner:

Alanko, Anita Karen

Commissioner of Patents and Trademarks Washington, D. C. 20231

I hereby certify that this correspondence is being deposited with the United States Postal

Service as first class mail in an envelope addressed to. Commissioner of Patents and Trademarks, Washington, D.C. 20231

on 10 1-2003

12362H

(Printed Name of Person Depositing)

Sir:

DECLARATION OF YAW S. OBENG IN ACCORDANCE WITH 37 C.F.R. § 1.132

The undersigned, Yaw S. Obeng, a United States citizen having an address of 272 Lytton Circle, Orlando, Florida 32824 declares the following.

- 1. I am a graduate of the University of Science and Technology, Kumasi, Ghana, with a Bachelors of Science degree in Chemistry; and a graduate of the University of Miami, Florida, U.S.A., with a Doctor of Philosophy Degree in Chemistry.
- 2. I am presently employed by PSILOQUEST, Inc. and have been engaged in the design and development of products and processes in the Chemical Mechanical Polishing industry for about eight years.
- 3. I am an inventor of the present application, have read and understand the Examiner's Action mailed August 3, 2003, and would like to clarify issues raised by the Examiner in the Action regarding the growth of microorganisms on the surface polyvinyl alcohol versus materials used for polishing pads. I would also like to clarify issues concerning the use of polyvinyl alcohol as a polishing pad.
- 4. Those skilled in the pertinent art will readily understand that polyvinyl alcohol and similar materials are intrinsically hydrophillic and therefore will automatically absorb atmospheric water and swell, thereby attracting and facilitating microorganism growth. This is in contrast to polishing pads made of material such as 6,6 nylon, 6,12 nylon, polyketone or polyurethane, which are more hydrophobic and therefore do not absorb the atmospheric water necessary to facilitate microorganism growth. Moreover, conventional polishing pads are stored and transported dry, and therefore microorganism growth is not an issue. Because dry conventional polishing pads are not particularly susceptible to attack by microorganisms there is no reason to store or ship them in an aqueous medium containing a preservative. In addition, conventional seasoning processes, such as that mentioned in the background section of the instant application, would eradicate and remove any microorganisms associated with the surface of the polishing pad.

Regarding the use of polyvinyl alcohol and similar materials as a polishing pad for CMP of semiconductor wafers, such materials are inappropriate for use in CMP. Polyvinyl alcohol-based polishing pads and the like would quickly hydrolyze and fall apart in the presence of the slurries and the shearing forces typically applied to polishing pads during the CMP of semiconductor wafers.

5. The undersigned declares that all statements made herein of his own knowledge are true, and all statements made on information are believed to be true; and furthermore, that the statements were made with the knowledge that willful, false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful, false statements may jeopardize the validity of the application or any patent issuing thereon.

Executed this 30th day of September, at Colonia.

Yaw S. Obeng